

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

1                    Claims 1-14 (canceled).

1                    15.    (New) A purified preparation of mammalian hemangioblast cells which  
2 (i) is capable of proliferation in an *in vitro* culture for more than 40 generations, (ii) does not  
3 induce tumor formation in an immunodeficient Rag1 deficient mouse, (iii) maintains the potential  
4 to differentiate to hematopoietic and endothelial cells throughout the duration of said culture, and  
5 (iv) are inhibited from differentiation when cultured on a gelatinized, feeder-free layer.

1                    16.    (New) The preparation of claim 15, wherein the cells are not  
2 immunoreactive with CD34, PECAM-1 (or CD31), Flk-1, Tie-2, Sca-1, Thy-1 and P-selectin  
3 markers.

1                    17.    (New) The preparation of claim 15 wherein the cells are human.

1                    18.    (New) The preparation of claim 15 wherein the mammalian  
2 hemangioblast cells are mouse embryonic cell line deposited under ATCC PTA-4300.

1                    19.    (New) A method of preparing a mammalian hemangioblast cell line,  
2 comprising the steps of: (i) culturing on a feeder layer a cell source selected from the group  
3 consisting of a delayed mammalian blastocyst, and early post-implantation embryo together with  
4 its extra-embryonic tissues, and embryonic stem cell-derived embryoid body, and bone marrow  
5 tissue, (ii) selecting colonies of adherent fibroblastic cells with loosely attached rapidly dividing  
6 round cells having ring-like cells at their edges, and (iii) testing cells in the selected colonies for  
7 ability to differentiate into both endothelial and hematopoietic cells.

1                   20.   (New) the method as claimed in claim 19, wherein the cell source is bone  
2 marrow tissue, and further comprising the step of harvesting bone marrow tissue which retains  
3 integrity in tissue clumps prior to the step of culturing.

1                   21.   (New) The method as claimed in claim 19, wherein the cell source is  
2 human.

1                   22.   (New) The method as claimed in claim 19, further comprising  
2 maintaining the selected cells on a gelatinized feeder-free layer to inhibit differentiation.

1                   23.   (New) A cell line developed by the method of claim 19.

1                   24.   (New) A method for inducing formation of new blood vessels in an  
2 ischemic tissue in a patient in need thereof, comprising administering to said patient an effective  
3 amount of the purified preparation of mammalian hemangioblast cells according to claim 17 to  
4 induce new blood vessel formation in said ischemic tissue.

1                   25.   (New) A method of enhancing blood vessel formation in a patient in need  
2 thereof, comprising: (i) selecting the patient in need thereof; (ii) isolating human hemangioblast  
3 cells according to the method of claim 21; and (iii) administering the hemangioblast cells to the  
4 patient.

1                   26.   (New) A method for treating an injured blood vessel in a patient in need  
2 thereof, comprising: (i) selecting the patient in need thereof; (ii) isolating human hemangioblast  
3 cells according to the method of claim 21; and (iii) administering the hemangioblast cells to the  
4 patient.

1                   27.   (New) A method of delivering a therapeutic gene to a patient having a  
2 condition amenable to gene therapy comprising: (i) selecting the patient in need thereof; (ii)  
3 modifying the preparation of claim 17 so that the cells of the preparation carry a therapeutic  
4 gene; and (iii) administering the modified preparation to the patient.

1                   28.     (New) A commercial package comprising the preparation of claim 17  
2     wherein the preparation has been modified so that the cells of the preparation carry a therapeutic  
3     gene, and instructions for treating a patient having a condition amendable to treatment with gene  
4     therapy.